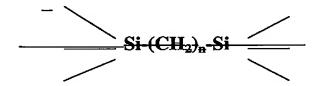
Section I. (Amendment to the Claims)

Please amend claims 1, 2, 19, 40, 41, and 65, withdraw claims 22-34, 40-41, 43-52 and 57-66, and cancel claims 3, 14-17, 35-39, 42 and 53-56, as set out below in the listing of claims 1-66 of the application.

- 1. (Currently Amended) An organosilicon precursor for vapor deposition of a low k, high strength dielectric film, wherein the precursor comprises at least one of:
 - (i) silicon-pendant oxiranyl functionality; and
 - (ii) a disilyl moiety of the formula



wherein x is an integer having a value of from 0 to 4 inclusive.

2. (Currently Amended) The organosilicon precursor of claim 1, comprising a compound selected from the group consisting of oxiranylsilane compounds of formula (II):

$$R_xSi-[-(CH_2)_n-C-R^*]_{4x}$$

wherein:

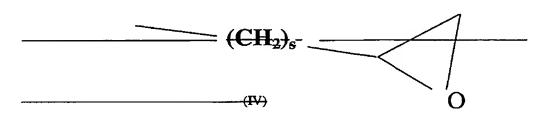
m is an integer having a value of 0 to 6, inclusive;

x is an integer having a value of 0 to 3, inclusive; and

each R and R $^{\bullet}$ can be the same as or different from one another and each is independently selected from the group consisting of H, C₁-C₈ alkyl, C₁-C₈ fluoroalkyl, C₁-C₈ alkoxy, C₆-C₁₀ cycloalkyl, C₆-C₁₀ aryl, C₆-C₁₀ fluoroaryl, C₂-C₆ vinyl, and C₃-C₆ allyl; and

wherein:

each of R⁴, R⁵, R⁶, R², R⁸-and R⁹-can be the same as or different from one another and each is independently selected from the group consisting of H, C₁-C₈-alkyl, C₄-C₈-fluoroalkyl, C₄-C₈-alkyl, C₄-C₆-thuoroalkyl, C₄-C₆-allyl, and exiranylalkylene of formula (IV)



wherein s is 0 or 1; and

y is an integer having a value of from 0 to 4 inclusive.

- 3. (Cancelled)
- 4. (Original) The organosilicon precursor of claim 1, having the formula (II):

$$R_2 \xrightarrow{R_1} | CH_2|_n \xrightarrow{R_3} (II)$$

wherein:

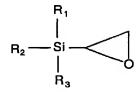
each of R_1 , R_2 and R_3 can be the same as or different from one another and each is independently selected from the group consisting of H, C_1 - C_8 alkyl, C_1 - C_8 fluoroalkyl, C_1 - C_8 alkoxy, C_6 - C_{10} cycloalkyl, C_6 - C_{10} aryl, C_6 - C_{10} fluoroaryl, C_2 - C_6 vinyl, and C_3 - C_6 allyl; and n is 0 or 1;

with the proviso that if n = 1, then one of R_1 , R_2 and R_3 alternatively can be



an oxiranyl functionality.

5. (Original) The organosilicon precursor of claim 1, having the formula (V):

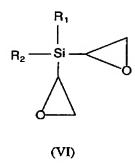


(V)

wherein:

each of R_1 , R_2 and R_3 is independently selected from the group consisting of H, C_1 - C_8 alkyl, C_1 - C_8 fluoroalkyl, C_1 - C_8 alkoxy, C_6 - C_{10} cycloalkyl, C_6 - C_{10} aryl, C_6 - C_{10} fluoroaryl, C_2 - C_6 vinyl, and C_3 - C_6 allyl.

6. (Original) The organosilicon precursor of claim 1, having the formula (VI):



wherein:

each of R_1 and R_2 is independently selected from the group consisting of H, C_1 - C_8 alkyl, C_1 - C_8 fluoroalkyl, C_1 - C_8 alkoxy, C_6 - C_{10} cycloalkyl, C_6 - C_{10} aryl, C_6 - C_{10} fluoroaryl, C_2 - C_6 vinyl, and C_3 - C_6 allyl.

7. (Original) The organosilicon precursor of claim 1, having the formula (VII):

$$R_1$$
 R_2
 Si
 CH_2
 R_3
 (VII)

wherein:

each of R₁, R₂ and R₃ is independently selected from the group consisting of H, C₁-C₈ alkyl, C₁-C₈ fluoroalkyl, C₁-C₈ alkoxy, C₆-C₁₀ cycloalkyl, C₆-C₁₀ aryl, C₆-C₁₀ fluoroaryl, C₂-C₆ vinyl, and C₃-C₆ allyl.

8. (Original) The organosilicon precursor of claim 1, having the formula (VIII):

$$R_1R_2Si-[-(CH_2)_m-C-R^*]_2$$
(VIII)

wherein:

m is an integer having a value of from 0 to 6 inclusive;

n is 0 or 1;

each R_1 , R_2 and R^{\bullet} can be the same as or different from one another and each is independently selected from the group consisting of H, C_1 - C_8 alkyl, C_1 - C_8 fluoroalkyl, C_1 - C_8 alkoxy, C_6 - C_{10} cycloalkyl, C_6 - C_{10} aryl, C_6 - C_{10} fluoroaryl, C_2 - C_6 vinyl, and C_3 - C_6 allyl.

9. (Original) The organosilicon precursor of claim 1, having the formula (IX):

$$R_1Si-[-(CH_2)_n-C-R^*]_3$$
(IX)

wherein:

m is an integer having a value of from 0 to 6 inclusive;

n is 0 or 1;

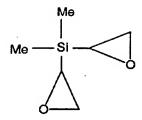
each of R_1 and R^* can be the same as or different from one another and each is independently selected from the group consisting of H, C_1 - C_8 alkyl, C_1 - C_8 fluoroalkyl, C_1 - C_8 alkoxy, C_6 - C_{10} cycloalkyl, C_6 - C_{10} aryl, C_6 - C_{10} fluoroaryl, C_2 - C_6 vinyl, and C_3 - C_6 allyl.

10. (Original) The organosilicon precursor of claim 1, selected from the group consisting of compounds of Formula (A), Formula (B) and Formula (C):

Formula (A), Me(EtO)₂SiCHCH₂O:

Formula (B), Me(MeO)₂Si CH₂CHCH₂O:

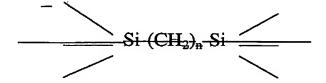
Formula (C), Me₂Si (CHCH₂O)₂:



wherein Me is methyl.

- 11. (Original) The organosilicon precursor of claim 10, having Formula (A).
- 12. (Original) The organosilicon precursor of claim 10, having Formula (B).
- 13. (Original) The organosilicon precursor of claim 10, having Formula (C).
- 14-17. (Cancelled)
- 18. (Original) The organositicon precursor of claim 1, wherein the precursor further comprises TMCTS.
- 19. (Currently Amended) An organosilicon precursor composition for vapor deposition of a low k, high strength dielectric film, wherein the composition comprises:
 - (A) an organosilicon precursor comprising at least one of:
 - (i) silicon-pendant oxiranyl functionality; and

(ii) a disilyl moiety of the formula



wherein x is an integer having a value of from 0 to 4 inclusive; and

- (B) a porogen.
- 20. (Original) The organosilicon precursor composition of claim 19, wherein said porogen is selected from the group consisting of compounds of the formula (X):

$$R^{10} R^{11} Si R^{12} R^{13}$$
 (X)

wherein:

each of R^{10} , R^{11} , R^{12} and R^{13} can be the same as or different from one another and each is independently selected from the group consisting of H, C_1 - C_8 alkyl, C_1 - C_8 alkoxyl, C_6 - C_{10} cycloalkyl, and C_6 - C_{10} aryl, with the proviso that at least one of R^{10} , R^{11} , R^{12} and R^{13} is C_1 - C_8 alkoxyl.

21. (Original) The organosilicon precursor composition of claim 19, wherein said porogen is selected from the group consisting of:

'Bu₂Si(OCH₃)₂

^tBu₂Si(OC₂H₅)₂

 $(C_6H_5)_2Si(OCH_3)_2$

 $(C_6H_5)_2Si(OC_2H_5)_2$

 $(C_6H_{11})_2Si(OCH_3)_2$

 $(C_6H_{11})_2Si(OC_2H_5)_2$

'BuSi(OCH₃)₂H

^tBuSi(OC₂H₅)₂H

(C₆H₅)Si(OCH₃)₂H

 $(C_6H_5)Si(OC_2H_5)_2H$

 $(C_6H_{11})Si(OCH_3)_2H$

 $(C_6H_{11})Si(OC_2H_5)_2H$

(Bu)(CH₃)Si(OCH₃)₂

 $(^{1}Bu)(CH_{3})Si(OC_{2}H_{5})_{2}$

 $(C_6H_5)(CH_3)Si(OCH_3)_2$

 $(C_6H_5)(CH_3)Si(OC_2H_5)_2$

 $(C_6H_{11})(CH_3)Si(OCH_3)_2$

 $(C_6H_{11})(CH_3)Si(OC_2H_5)_2$

wherein 'Bu is tertiary butyl.

22. (Withdrawn) A method of forming an oxiranylsilane compound of formula (I):

$$R_xSI - [-(CH_2)_n - C - R^*]_{4x}$$

wherein:

m is an integer having a value of 0 to 6, inclusive;

n is 0 or 1;

x is an integer having a value of 0 to 3, inclusive; and

each R and R* can be the same as or different from one another and each is independently selected from the group consisting of H, C₁-C₈ alkyl, C₁-C₈ fluoroalkyl, C₁-C₈ alkoxy, C₆-C₁₀ cycloalkyl, C₆-C₁₀ aryl, C₆-C₁₀ fluoroaryl, C₂-C₆ vinyl, and C₃-C₆ allyl,

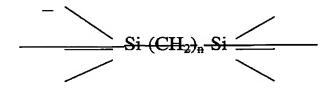
said method comprising oxidizing a corresponding vinylsilane or allylsilane compound.

- 23. (Withdrawn) The method of claim 22, wherein the step of oxidizing comprises reaction with an oxidizing agent that is inert in relation to Si-OR fragments.
- 24. (Withdrawn) The method of claim 23, wherein said oxidizing agent comprises an agent selected from the group consisting of meta-Cl(C₆H₄)C(O)OOH, 'BuOOH, wherein 'Bu is tertiary butyl, and Me₃OOSiMe₃, wherein Me is methyl.
- 25. (Withdrawn) The method of claim 23, wherein said oxidizing agent comprises meta-Cl(C₆H₄)C(O)OOH.
- 26. (Withdrawn) The method of claim 22, wherein said step of oxidizing is conducted in a non-flammable solvent medium.
- 27. (Withdrawn) The method of claim 26, wherein said non-flammable solvent medium comprises dichloromethane.

- 28. (Withdrawn) The method of claim 26, wherein said non-flammable solvent medium comprises chloroform.
- 29. (Withdrawn) The method of claim 22, wherein said oxiranylsilane compound is Me(EtO)₂SiCHCH₂O.
- (Withdrawn) The method of claim 29, wherein said oxidizing step comprises Reaction(1).
- 31. (Withdrawn) The method of claim 22, wherein said oxiranylsilane is Me(MeO)₂SiCH₂CHCH₂O.
- 32. (Withdrawn) The method of claim 31, wherein said oxidizing step comprises Reaction (2).
- 33. (Withdrawn) The method of claim 22, wherein said oxiranylsilane is Me₂Si (CHCH₂O)₂.
- 34. (Withdrawn) The method of claim 33, wherein said oxidizing step comprises Reaction
- 35-39. (Cancelled)

(3).

- 40. (Withdrawn) A method of forming a low k, high strength dielectric film on a substrate, comprising vapor depositing said film on the substrate from a precursor comprising at least one of:
 - (i) silicon-pendant oxiranyl functionality; and
 - (ii) a disilyl moiety of the formula-



wherein x is an integer having a value of from 0 to 4 inclusive.

41. (Withdrawn) The method of claim 40, wherein said precursor comprises a compound is selected from the group consisting of oxiranylsilane compounds of formula (II) and disilane compounds of formula (III):

$$R_xSi-[-(CH_2)_n-C - R^*]_{4-x}$$
(I)

wherein:

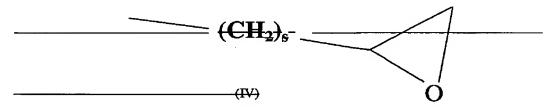
m is an integer having a value of 0 to 6, inclusive;

x is an integer having a value of 0 to 3, inclusive; and

each R and R* can be the same as or different from one another and each is independently selected from the group consisting of H, C₁-C₈ alkyl, C₁-C₈ fluoroalkyl, C₁-C₈ alkoxy, C₆-C₁₀ cycloalkyl, C₆-C₁₀ aryl, C₆-C₁₀ fluoroaryl, C₂-C₆ vinyl, and C₃-C₆ allyl; and

wherein:

each of R⁴, R⁵, R⁶, R⁷, R⁸ and R⁹ can be the same as or different from one another and each is independently selected from the group consisting of H, C₁-C₈ alkyl, C₁-C₈ fluoroalkyl, C₁-C₈ alkoxyl, C₆-C₁₀ cycloalkyl, C₆-C₁₀ aryl, C₆-C₁₀ fluoroaryl, C₂-C₆ vinyl, C₃-C₆ allyl, and exiranylalkylene of formula (IV)



wherein s is 0 or 1; and

y is an integer-having a value of from 0 to 4 inclusive.

42. (Cancelled)

43. (Withdrawn) The method of claim 41, wherein the precursor comprises a compound having the formula (II):

$$R_2 \xrightarrow{R_1} (CH_2)_n \xrightarrow{R_3} (II)$$

wherein:

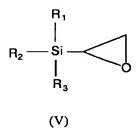
each of R₁, R₂ and R₃ can be the same as or different from one another and each is independently selected from the group consisting of H, C₁-C₈ alkyl, C₁-C₈ fluoroalkyl, C₁-C₈ alkoxy, C₆-C₁₀ cycloalkyl, C₆-C₁₀ aryl, C₆-C₁₀ fluoroaryl, C₂-C₆ vinyl, and C₃-C₆ allyl; and n is 0 or 1;

with the proviso that if n = 1, then one of R_1 , R_2 and R_3 alternatively can be



an oxiranyl functionality.

44. (Withdrawn) The method of claim 41, wherein the precursor comprises a compound having the formula (V):



wherein:

each of R_1 , R_2 and R_3 is independently selected from the group consisting of H, C_1 - C_8 alkyl, C_1 - C_8 fluoroalkyl, C_1 - C_8 alkoxy, C_6 - C_{10} cycloalkyl, C_6 - C_{10} aryl, C_6 - C_{10} fluoroaryl, C_2 - C_6 vinyl, and C_3 - C_6 allyl.

45. (Withdrawn) The method of claim 41, wherein the precursor comprises a compound having the formula (VI):

$$R_2$$
 Si
 (VI)

wherein:

each of R_1 and R_2 is independently selected from the group consisting of H, C_1 - C_8 alkyl, C_1 - C_8 fluoroalkyl, C_1 - C_8 alkoxy, C_6 - C_{10} cycloalkyl, C_6 - C_{10} aryl, C_6 - C_{10} fluoroaryl, C_2 - C_6 vinyl, and C_3 - C_6 allyl.

46. (Withdrawn) The method of claim 41, wherein the precursor comprises a compound having the formula (VII):

wherein:

each of R_1 , R_2 and R_3 is independently selected from the group consisting of H, C_1 - C_8 alkyl, C_1 - C_8 fluoroalkyl, C_1 - C_8 alkoxy, C_6 - C_{10} cycloalkyl, C_6 - C_{10} aryl, C_6 - C_{10} fluoroaryl, C_2 - C_6 vinyl, and C_3 - C_6 allyl.

47. (Withdrawn) The method of claim 41, wherein the precursor comprises a compound having the formula (VIII):

$$R_1R_2Si-[-(CH_2)_n-C-R^*]_2$$
(VIII)

wherein:

m is an integer having a value of from 0 to 6 inclusive;

n is 0 or 1;

each R₁, R₂ and R^{*} can be the same as or different from one another and each is independently selected from the group consisting of H, C₁-C₈ alkyl, C₁-C₈ fluoroalkyl, C₁-C₈ alkoxy, C₆-C₁₀ cycloalkyl, C₆-C₁₀ aryl, C₆-C₁₀ fluoroaryl, C₂-C₆ vinyl, and C₃-C₆ allyl.

48. (Withdrawn) The method of claim 41, wherein the precursor comprises a compound having the formula (IX):

$$R_1Si-[-(CH_2)_n-C-R^n]_3$$
(IX)

wherein:

m is an integer having a value of from 0 to 6 inclusive;

n is 0 or 1;

each of R_1 and R^* can be the same as or different from one another and each is independently selected from the group consisting of H, C_1 - C_8 alkyl, C_1 - C_8 fluoroalkyl, C_1 - C_8 alkoxy, C_6 - C_{10} cycloalkyl, C_6 - C_{10} aryl, C_6 - C_{10} fluoroaryl, C_2 - C_6 vinyl, and C_3 - C_6 allyl.

49. (Withdrawn) The method of claim 41, wherein the precursor comprises a compound selected from the group consisting of compounds of Formula (A), Formula (B) and Formula (C):

Formula (A), Me(EtO)₂SiCHCH₂O:

Formula (B), Me(MeO)₂Si CH₂CHCH₂O :

Formula (C), Me₂Si (CHCH₂O)₂:

wherein Me is methyl.

- 50. (Withdrawn) The method of claim 49, wherein the precursor comprises a compound of Formula (A).
- 51. (Withdrawn) The method of claim 49, wherein the precursor comprises a compound of Formula (B).
- 52. (Withdrawn) The method of claim 49, wherein the precursor comprises a compound of Formula (C).

53-56. (Cancelled)

- 57. (Withdrawn) The method of claim 40, wherein said vapor depositing step comprises use of a porogen in combination with said precursor.
- 58. (Withdrawn) The method of claim 57, wherein said porogen is selected from the group consisting of compounds of the formula (X):

$$R^{10} R^{11} Si R^{12} R^{13}$$
 (X)

wherein:

each of R^{10} , R^{11} , R^{12} and R^{13} can be the same as or different from one another and each is independently selected from the group consisting of H, C_1 - C_8 alkyl, C_1 - C_8 alkoxyl, C_6 - C_{10} cycloalkyl, and C_6 - C_{10} aryl, with the proviso that at least one of R^{10} , R^{11} , R^{12} and R^{13} is C_1 - C_8 alkoxyl.

59. (Withdrawn) The method of claim 57, wherein said porogen is selected from the group consisting of:

'Bu₂Si(OCH₃)₂

 $^{t}Bu_{2}Si(OC_{2}H_{5})_{2}$

 $(C_6H_5)_2Si(OCH_3)_2$

 $(C_6H_5)_2Si(OC_2H_5)_2$

 $(C_6H_{11})_2Si(OCH_3)_2$

 $(C_6H_{11})_2Si(OC_2H_5)_2$

'BuSi(OCH₃)₂H

'BuSi(OC₂H₅)₂H

(C₆H₅)Si(OCH₃)₂H

 $(C_6H_5)Si(OC_2H_5)_2H$

 $(C_6H_{11})Si(OCH_3)_2H$

 $(C_6H_{11})Si(OC_2H_5)_2H$

(Bu)(CH₃)Si(OCH₃)₂

 $(^{1}Bu)(CH_{3})Si(OC_{2}H_{5})_{2}$

 $(C_6H_5)(CH_3)Si(OCH_3)_2$

 $(C_6H_5)(CH_3)\mathrm{Si}(OC_2H_5)_2$

 $(C_6H_{11})(CH_3)Si(OCH_3)_2$

 $(C_6H_{11})(CH_3)Si(OC_2H_5)_2$

wherein 'Bu is tertiary butyl.

- 60. (Withdrawn) The method of claim 40, wherein said vapor depositing step comprises chemical vapor deposition.
- 61. (Withdrawn) The method of claim 40, wherein said vapor depositing step comprises plasma-enhanced chemical vapor deposition.
- 62. (Withdrawn) The method of claim 40, wherein said vapor depositing step comprises flowing said precursor to a vapor deposition locus in a carrier gas.
- 63. (Withdrawn) The method of claim 62, wherein said carrier gas comprises carbon dioxide.

- 64. (Withdrawn) The method of claim 62, wherein the precursor and the carrier gas are the only potential sources of oxygen at the vapor deposition locus.
- 65. (Withdrawn) The method of claim 40, wherein the precursor is selected from the group consisting of:

Me(EtO)₂SiCHCH₂O;

Me(MeO)₂Si CH₂CHCH₂O; and

Me₂Si (CHCH₂O)₂₇

Me(MeO)₂SiCH₂CH₂SiMe(OMe)₂;

Me2(MeO)SiCH2CH2SiMe2(OMe); and

 $(MeO)_3SiCH_2Si(OMe)_2$.

66. (Withdrawn) The method of claim 40, wherein the precursor further comprises TMCTS.